New Program

Program Planning Summary

- I. New Program Proposal: Master of Science in Dentistry (MSD)
- II. Proposed Date of Implementation: Fall 2007
- III. Number of Credit Hours: 45
- IV. Justification

The College of Dental Medicine (CDM) offers fully accredited residency programs in Oral and Maxillofacial Surgery, Orthodontics, Pediatric Dentistry and Periodontics. Traditionally the residency programs have focused on the clinical training of residents with limited instruction in didactic components, research, education methodology, biomedical and behavioral sciences.

The residency program in Periodontics has collaborated with the College of Health Professions (CHP) and the College of Graduate Studies (CGS) to provide an opportunity for the residents/graduate students to earn Master of Health Sciences (MHS) or Master of Science (MS) degrees respectively. The MHS degree program will be discontinued in the near future. Due to the time commitment to intensive clinical training by the respective residency programs and the restructuring of the curriculum by the College of Graduate Studies, the MS degree program offered through the College of Graduate Studies is no longer a viable option for residents/graduate students.

The residency/graduate programs in Orthodontics and Periodontics require that the enrolled residents/graduate students complete a Master's degree program concurrently with the successful completion of their clinical training programs. The Advanced Education Committee of the College of Dental Medicine has reviewed the matter carefully and has consulted with the Schools of Dentistry of Indiana University and the University of Minnesota. Based on review of the academic needs of the College of Dental Medicine residency/graduate programs, the Committee has decided to consolidate the didactic, clinical and research training of the residency programs culminating in the award of the Master of Science In Dentistry (MSD) degree to be offered by the College of Dental Medicine.

The implementation of the MSD Program will enable the residents/graduate students to attain specialty focused clinical competency and receive formal (course/credit hours) didactic instruction, training in research methodology, conduct of research, data analysis and writing of manuscript/thesis. The students will complete a minimum of 45 credit hours to earn the MSD degree. The MSD program will be designed to develop dental specialists with a sound academic background on which to base clinical treatment. The didactic component will include instruction in biomedical and behavioral sciences, and education methodology.

The graduates of the program will be board eligible dental specialists who will also earn an MSD degree. By virtue of formal and multifaceted education received through the proposed program, the graduates will be able to pursue clinical practice, conduct research and become productive members of the collaborative research teams. The graduates will also have the competitive edge in earning a faculty position at an academic health center or other teaching institutions.

The goals of the residency/graduate programs are to provide superior clinical training based upon a sound foundation of scientific principles, an understanding of behavioral sciences, discovery of new knowledge for future growth and development of a specialty in dentistry. The proposed MSD program will educate and produce dental specialists who will acquire the above outlined qualifications and characteristics. They will provide superior clinical care, conduct and appreciate acquisition of new knowledge, as well as better understand human behavior and diversity in relation to patient management.

The incorporation of the MSD program into the existing residency programs will assist in meeting stringent accreditation standards. Residents will also become eligible for academic related federal financial assistance. The incentive of earning an MSD degree along with clinical specialty training will expand the highly qualified pool of applicants for various residency programs.

V. Program Demand and Productivity:

The duration of dental residency/graduate programs is 24-48 months. The Orthodontics and Periodontics are of 36 months duration and will require that the residents/graduate students earn an MSD degree concurrently with the clinical training. The MSD degree program will be optional but strongly recommended for other residency programs. The trend in dental residency education is toward a Masters' degree along with a certificate of residency completion. Establishing a Master's program will allow us to attract and train the best residents.

The MSD degree program will only be offered to and open to the residents/graduate students accepted in the CDM residency/graduate programs.

The duration of the Periodontics and Orthodontics residency programs is 36 months. This is an adequate time period for residents/graduate students to complete the requirements of the MSD degree program including the conduct of research project, writing of a thesis/manuscript, thesis defense, and concurrent successful completion of clinical training.

The proposed program will be fully operational in three years with an expected average of 6-8 graduates per year. As new residency/graduate programs are developed and become operational the expected number of graduates earning MSD degrees will increase.

VI. Project Duplication

This will not be a factor. No such program is offered by any institution in the State of South Carolina. However similar programs are offered at the academic health centers/Colleges of Dental Medicine in many other states.

VII. Relationship of the Program to Existing Programs at the Proposing Institution:

The proposed MSD degree program will augment and strengthen the existing residency/graduate programs in various dental specialties by providing formal and organized instruction in various didactic and clinical components, research, biomedical and behavioral sciences, and education methodology. The graduates will be well trained clinicians with a much broader foundation, and outlook and service opportunities.

CDM is one of the six colleges of MUSC, an academic health center of the State of South Carolina. The CDM has exemplary collaborative

relationships with all the colleges of MUSC, CHP and CGS in particular. The CDM has collaborated with joint academic and research programs with all of the colleges of MUSC. In addition to the courses offered by CDM, the MSD degree program will take advantage of many excellent courses offered in Biomedical and Behavioral Sciences and of the research opportunities offered by the MUSC Colleges for partial fulfillment of requirements of the proposed program. The Deans of MUSC Colleges are supportive of the establishment of such collaborations and the proposed program.

VIII. Relationship of the Proposed Program to Other Institutions Via Inter-institutional Cooperation:

MUSC and Clemson University have very active collaborative relationship in academic and research areas. The CDM faculty interact with the Clemson University Bioengineering and Material Sciences faculty based at the MUSC Charleston campus. The resident/graduate students of the proposed MSD program will be exposed to the Clemson faculty and encouraged to pursue research projects with a direct or indirect relationship to dentistry.

The South Carolina College of Pharmacy also provides an opportunity to residents/graduate students to pursue collaborative research in the areas of Pharmacology and Therapeutics.

The Dental Medicine Scientist Training program of the CDM is well established and actively collaborates with the National Institute of Dental and Craniofacial Research. The residents/graduate students of the proposed MSD degree program will have the opportunity to pursue research projects in collaboration with NIDCR.

IX. Total New Cost Associated with Implementing the Proposed Program (general estimate only):

The MSD degree program in general will be implemented with consolidation of existing resources and faculty actively involved in the multifaceted instruction of residents/graduate students. A staff position and a partial faculty commitment will be needed to fully implement the program and to support the residency program directors on an ongoing basis.

Anticipated Annual Expenses:

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Director (partial time commitment)=	30,000.
Staff (partial time commitment)=	20,000.
Printing Brochures, etc.=	2,000.
Information Technology =	10,000.
Outcomes Assessment =	5,000.
<u>Library/Office Supplies</u> =	<u>5,000</u> .
Annual Total =	72,000.
Nonrecurring Expenses	
Consultant =	3,000.
Faculty Retreat =	1,000.
Establishment of an Office =	<u>5,000</u> .
Nonrecurring Total =	9,000.

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